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## Claim Amendments.

1. (currently amended): A compound of formula I:

or a pharmaceutically acceptable derivative salt, ester, salt of an ester, stereoisomer, enantiomer, isotope, or tautomer thereof, wherein:

ring A is optionally substituted and is

each R1 and R2 is independently H, alkyl, or fluoroalkyl;

R<sup>3</sup> is H, alkyl, fluoroalkyl, aralkyl, carbocyclylalkyl, heterocyclyl, carbocyclyl, heterocyclylalkyl, aryl, heteroaryl, heteroaralkyl, -C(O)R, -OR,

 $-(CH_2)_{1-6}OR$ ,  $-(CH_2)_{1-6}N(R)_2$ ,  $-N(R)_2$ , or -C(H)(OR)R;

 $R^4$  is H, alkyl, fluoroalkyl, -CO<sub>2</sub>R, -CON(R)<sub>2</sub>, carbocyclyl, carbocyclylalkyl, heteroaryl, or heterocyclyl;

 $R^5$  is  $-OR^7$  or  $-NR^8R^9$ ;

 $R^6$  is -C(O)R, -C(S)R, -C=C-C(O)R, -SR, -S-W-OR<sup>7</sup>,  $M_7$  or Y;

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R<sup>7</sup> is R°, -C(O)R, -C(O)N(R)<sub>2</sub>, -C(O)OR, -(CH<sub>2</sub>)<sub>1-6</sub>-C(O)R, -PO<sub>3</sub>M<sub>x</sub>,
-P(O)(alkyl)OM', -(PO<sub>3</sub>)<sub>2</sub>M<sub>y</sub>, carbocyclyl, aryl, heterocyclyl, heterocyclyl, carbocyclylalkyl, or heteroaralkyl, or a tumor-targeting moiety.
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x is 1 or 2;
y is 1, 2 or 3;
each M is independently H, Li, Na, K, Mg, Ca, Mn, Co, Ni, Zn, or alkyl;
M' is H, Li, Na, K, or alkyl;
R<sup>8</sup> is H or alkyl;

 $R^9$  is H, alkyl, -C(O)R,  $-C(O)N(R)_2$ , -C(O)OR,  $-SO_2R$ ,  $-SO_2N(R)_2$ , carbocyclyl, aryl, heterocyclyl, heterocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl or a tumor targeting moiety;

each R<sup>a</sup> and R<sup>b</sup> is independently H, OR°, alkyl, or fluoroalkyl; each R° and R<sup>d</sup> is independently H, alkyl, or fluoroalkyl; n is 0-4;

W is alkylene, arylene, heteroarylene, carbocyclylene, or heterocyclylene; R° is H or alkyl; and

R is R°, carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl.

- 2. (previously presented) The compound of claim 1, wherein R<sup>6</sup> is Y or -SR.
- 3. (cancelled).

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- 4. (currently amended) The compound of claim 1, wherein:
  - i) R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> are independently H, C<sub>1-6</sub> alkyl or fluoro(C<sub>1-6</sub> alkyl);
  - ii)  $R^3$  is H, alkyl, fluoroalkyl,  $-(CH_2)_{1-6}OR$ ,  $-(CH_2)_{1-6}N(R)_2$ ,

-NR°C(O)R, -C(O)R, -C(H)(OR)R, aralkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, or heteroaralkyl;

- iii)  $R^6$  is -C=C-C(O)R, -SR, -S-W-OR<sup>7</sup>, M-or Y:
- iv) R<sup>7</sup> is H, alkyl, -C(O)R, -PO<sub>3</sub>M<sub>x</sub>, -(PO<sub>3</sub>)<sub>2</sub>M<sub>y</sub>, -P(O)(alkyl)OM',
  -C(O)N(R)<sub>2</sub>, or -C(O)OR, or a tumor targeting moiety; or R<sup>9</sup> is H, alkyl, -C(O)R,
  -C(O)N(R)<sub>2</sub>, -C(O)OR, -SO<sub>2</sub>R, 5-membered heterocyclyl, or a 5-membered heteroaralkyl, or a tumor targeting moiety; and
  - v) n is 1.
- 5. (previously presented) The compound of claim 4, wherein R is R<sup>o</sup>, carbocyclyl, aryl, heterocyclyl, aralkyl, heterocyclylalkyl or heteroaralkyl.
- 6. (previously presented) The compound of claim 5, wherein  $R^0$  is H or  $C_{1-6}$  alkyl optionally substituted with halo, hydroxy or amino.
- 7. (previously presented) The compound of claim 4, wherein:
- i) ring A is optionally substituted with  $-NH_2$ , alkyl,  $-OC(O)R^{\dagger}$ , halo,  $-OR^{\dagger}$ ,  $-CF_3$ ,  $-OCF_3$ ,  $-SCF_3$ ,  $-SR^{\dagger}$ ,  $-R^{\dagger}$ ,  $-NR^{\dagger}C(O)R^{\dagger}$ ,  $-CO_2R^{\dagger}$ ,  $-NO_2$ ,  $-N(R^{\dagger})_2$ , -CN,  $-C(O)R^{\dagger}$ ,  $-C(O)N(R^{\dagger})_2$ ,  $-SO_2N(R^{\dagger})_2$ ,  $-NR^{\dagger}CO_2R^{\dagger}$ ,  $-C(O)C(O)R^{\dagger}$ ,  $-OC(O)N(R^{\dagger})_2$ ,  $-S(O)_1R^{\dagger}$ ,  $-C(O)CH_2C(O)R^{\dagger}$ ,  $-NR^{\dagger}SO_2R^{\dagger}$ , or  $-C(=S)N(R^{\dagger})_2$ ; and  $R^{\dagger}$  is 3-6 membered unsubstituted cycloalkyl, phenyl, benzyl, naphthyl, pyridyl, or  $C_{1-6}$  alkyl optionally substituted with halo;
  - ii)  $R^3$  is H,  $C_{1-6}$  alkyl, -(CH<sub>2</sub>)<sub>1-6</sub>OR° or -CH(OR°)R°;

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- iii)  $R^6$  is -C=C-C(O)R, -SR, -S-W-OR<sup>7</sup> or Y; and
- iv) R<sup>8</sup> is H or C<sub>1-6</sub> unsubstituted alkyl.
- 8. (currently amended) The compound of claim 7, wherein  $R^7$  or  $R^9$  is H, a polysaccharide,  $\frac{\{C(O)CH(R)N(R)\}_{2,3}-R$ , an antibody, or

9. (currently amended) The compound of claim 7, wherein:

- i) R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> are independently H, methyl, ethyl, -CH<sub>2</sub>F, -CHF<sub>2</sub>, or -CF<sub>3</sub>;
- ii) R<sup>3</sup> is H, methyl, ethyl, -CH(OH)CH<sub>3</sub>, -CH<sub>2</sub>OH, or -CH<sub>2</sub>CH<sub>2</sub>OH;
- iii)  $R^6$  is -S-( heterocyclylalkyl), ( -S-(unsubstituted  $C_{1-6}$  alkyl), Y,

- iv) R<sup>8</sup> is H, methyl, or ethyl; and
- v) R<sup>7</sup> is H, methyl, ethyl, -C(O)Me, -C(O)Et, -C(O)NMe<sub>2</sub>, -C(O)-p-OMephenyl, -C(O)O-phenyl, -PO<sub>3</sub>H<sub>2</sub>, -P(O)(OMe)<sub>2</sub>, -P(O)(OMe)OH, -P(O)(Me)OH, -P(O)(OH)OP(O)(OH)(OH), or R<sup>11</sup>; and R<sup>11</sup> is selected from the group consisting of:

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, and an antibody; or

R<sup>9</sup> is H, methyl, ethyl, R<sup>11</sup>,

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10. (currently amended) The compound of claim1, wherein said compound is selected from the group consisting of the compounds of:

## (1) formula IIa:

where  $R^3$  and  $R^4$  are independently H or alkyl,  $R^6$  is -SR,  $R^7$  is  $R^\circ$ , and  $R^*$  can be the same or different and is selected from the group consisting of alkyl and  $NH_{24}$ 

## (2) formulae III-13 to III-18, :

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and

(3) formulae IV 13 to IV 18:

11. (previously presented) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

12.-22. (cancelled).

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## 23. (currently amended) A compound of the formula:

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(d) ·

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**(f)** 

(g)

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(h)

(i)

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**(j)** 

(k)

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(1)

(m)

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(n)

**(o)** 

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**(p)** 

or a pharmaceutically acceptable derivative salt, ester, salt of an ester, stereoisomer, enantiomer, isotope, or tautomer thereof.

24. (previously presented) The compound of claim 23, wherein the compound is:

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25. (currently amended) A compound of the formula

$$\begin{pmatrix}
R^{2} \\
\Pi
\end{pmatrix}$$

$$\begin{pmatrix}
R^{2} \\
\Pi
\end{pmatrix}$$

$$\begin{pmatrix}
R^{3} \\
R^{4}
\end{pmatrix}$$

$$\begin{pmatrix}
R^{3} \\
R^{6}
\end{pmatrix}$$

$$\begin{pmatrix}
R^{3} \\
R^{6}
\end{pmatrix}$$

or a pharmaceutically acceptable derivative <u>salt</u>, ester, salt of an ester, stereoisomer, enantiomer, isotope, or tautomer thereof, wherein:

- (a) R<sup>3</sup> and R<sup>4</sup> may each be the same or different to the extent they occur more than once in the compound and are independently H or alkyl;
- (b) R<sup>7</sup> may be the same or different to the extent it occurs more than once in the compound and is independently R° or -C(O)R, where R° is H or alkyl and R is R°, carbocyclyl, aryl, heterocyclyl, heterocyclyl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl;
- (c) R<sup>x</sup> may be the same or different to the extent it occurs more than once in the compound and is independently alkyl or NH<sub>2</sub>;

(d) 
$$R^6$$
 is  $-SR$ ,  $-C(O)R$ ,

or

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$$\begin{pmatrix}
R^{x} \end{pmatrix}_{11}^{N} \\
R^{4} \\
R^{3} \\
R^{3}$$

; and

(e) n is 0, 1, 2, or 3.